

## SEQUENCE LISTING

&lt;110&gt; Takeda Chemical Industries, Ltd.

&lt;120&gt; Novel Protein and its Production

&lt;130&gt; A98132

&lt;150&gt; JP 10-250108

&lt;151&gt; 1998-09-03

&lt;160&gt; 19

&lt;210&gt; 1

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; Human

&lt;400&gt; 1

Met Lys Val Leu Ile Ser Ser Leu Leu Leu Leu Leu Pro Leu Met Leu

1 5 10 15

Met Ser Met Val Ser Ser Ser Leu Asn Pro Gly Val Ala Arg Gly His

20 25 30

Arg Asp Arg Gly Gln Ala Ser Arg Arg Trp Leu Gln Glu Gly Gly Gln

35 40 45

Glu Cys Glu Cys Lys Asp Trp Phe Leu Arg Ala Pro Arg Arg Lys Phe

50 55 60

Met Thr Val Ser Gly Leu Pro Lys Lys Gln Cys Pro Cys Asp His Phe

65 70 75 80

Lys Gly Asn Val Lys Lys Thr Arg His Gln Arg His His Arg Lys Pro

85 90 95

Asn Lys His Ser Arg Ala Cys Gln Gln Phe Leu Lys Gln Cys Gln Leu

100 105 110

Arg Ser Phe Ala Leu Pro Leu

115 119

&lt;210&gt; 2

&lt;211&gt; 119

&lt;212&gt; PRT



Thr Ala Val Leu Gly Pro Pro Arg Lys Gln Cys Pro Cys Asp His Val  
 65 70 75 80  
 Lys Gly Arg Glu Lys Lys Asn Arg His Gln Lys His His Arg Lys Ser  
 85 90 95  
 Gln Arg Pro Ser Arg Ala Cys Gln Gln Phe Leu Lys Arg Cys His Leu  
 100 105 110  
 Ala Ser Phe Ala Leu Pro Leu  
 115 119

&lt;210&gt; 4

&lt;211&gt; 357

&lt;212&gt; DNA

&lt;213&gt; Human

&lt;400&gt; 4

ATGAAAGTTC TAATCTCTTC CCTCCTCCTG TTGCTGCCAC TAATGCTGAT GTCCATGGTC 60  
 TCTAGCAGCC TGAATCCAGG GGTCGCCAGA GGCCACAGGG ACCGAGGCCA GGCTTCTAGG 120  
 AGATGGCTCC AGGAAGGCGG CCAAGAATGT GAGTGCAAAG ATTGGTTCCT GAGAGCCCCG 180  
 AGAAGAAAAT TCATGACAGT GTCTGGGCTG CCAAAGAAGC AGTGCCCCTG TGATCATTTT 240  
 AAGGGCAATG TGAAGAAAAC AAGACACCAA AGGCACCACA GAAAGCCAAA CAAGCATTCC 300  
 AGAGCCTGCC AGCAATTTCT CAAACAATGT CAGCTAAGAA GCTTTGCTCT GCCTTTG 357

&lt;210&gt; 5

&lt;211&gt; 357

&lt;212&gt; DNA

&lt;213&gt; Rat

&lt;400&gt; 5

ATGAAGCTTC TAGCCTCTCC CTTCTTCTG TTGCTGACAG GGATGTTTAC GGCCACGGTC 60  
 TCCAGCAGCC CGAATCAAGA GGTCGCCAGA CACCATGGGG ATCAACACCA GGCTCCTAGG 120  
 AGGTGGCTCT GGGAAGGTGG CCAAGAGTGT GACTGCAAAG ATTGGTCCCT GCGAGTCTCA 180  
 AAGAGAAAAA CCACAGCAGT GCTGGAGCCA CCAAGGAAGC AGTGTCCCTG TGATCATGTC 240  
 AAGGGCAGTG AGAAAAAGAA CAGACGCCAA AAGCACCACA GGAAGTCACA AAGGCCCTCC 300  
 AGAACCTGCC AGCAATTTCT CAAGCGATGT CAACTAGCAA GCTTCGCCCT GCCCTTA 357

&lt;210&gt; 6

<211> 357

<212> DNA

<213> Mouse

<400> 6

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 AGGTGGCTCT TGGAAGGTGG CCAAGAATGT GAATGCAAAG ATTGGTTCCT GCAAGCCCCA 180  
 AAGAGAAAAG CCACAGCAGT GCTGGGGCCA CCAAGGAAGCA GTGTCCCTG TGATCACGTC 240  
 AAGGGCAGGG AGAAAAAAAA CAGACACCAA AAGCACCACA GGAAGTCGCA AAGACCCTCC 300  
 AGAGCCTGCC AGCAATTTCT CAAACGATGT CACCTGGCAA GCTTTGCGCT GCCCTTA 357

<210> 7

<211> 97

<212> PRT

<213> Human

<400> 7

Ser Leu Asn Pro Gly Val Ala Arg Gly His Arg Asp Arg Gly Gln Ala  
 1 5 10 15  
 Ser Arg Arg Trp Leu Gln Glu Gly Gly Gln Glu Cys Glu Cys Lys Asp  
 20 25 30  
 Trp Phe Leu Arg Ala Pro Arg Arg Lys Phe Met Thr Val Ser Gly Leu  
 35 40 45  
 Pro Lys Lys Gln Cys Pro Cys Asp His Phe Lys Gly Asn Val Lys Lys  
 50 55 60  
 Thr Arg His Gln Arg His His Arg Lys Pro Asn Lys His Ser Arg Ala  
 65 70 75 80  
 Cys Gln Gln Phe Leu Lys Gln Cys Gln Leu Arg Ser Phe Ala Leu Pro  
 85 90 95  
 Leu

97

<210> 8

<211> 97

&lt;212&gt; PRT

&lt;213&gt; Rat

&lt;400&gt; 8

Ser Pro Asn Gln Glu Val Ala Arg His His Gly Asp Gln His Gln Ala

1 5 10 15

Pro Arg Arg Trp Leu Trp Glu Gly Gly Gln Glu Cys Asp Cys Lys Asp

20 25 30

Trp Ser Leu Arg Val Ser Lys Arg Lys Thr Thr Ala Val Leu Glu Pro

35 40 45

Pro Arg Lys Gln Cys Pro Cys Asp His Val Lys Gly Ser Glu Lys Lys

50 55 60

Asn Arg Arg Gln Lys His His Arg Lys Ser Gln Arg Pro Ser Arg Thr

65 70 75 80

Cys Gln Gln Phe Leu Lys Arg Cys Gln Leu Ala Ser Phe Ala Leu Pro

85 90 95

Leu

97

&lt;210&gt; 9

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Mouse

&lt;400&gt; 9

Ser Pro Asn Pro Gly Val Ala Arg Ser His Gly Asp Gln His Leu Ala

1 5 10 15

Pro Arg Arg Trp Leu Leu Glu Gly Gly Gln Glu Cys Glu Cys Lys Asp

20 25 30

Trp Phe Leu Gln Ala Pro Lys Arg Lys Ala Thr Ala Val Leu Gly Pro

35 40 45

Pro Arg Lys Gln Cys Pro Cys Asp His Val Lys Gly Arg Glu Lys Lys

50 55 60

Asn Arg His Gln Lys His His Arg Lys Ser Gln Arg Pro Ser Arg Ala

65

70

75

80

Cys Gln Gln Phe Leu Lys Arg Cys His Leu Ala Ser Phe Ala Leu Pro

85

90

95

Leu

97

<210> 10

<211> 291

<212> DNA

<213> Human

<400> 10

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AAATTCATGA CAGTGTCTGG GCTGCCAAAG AAGCAGTGCC CCTGTGATCA TTTCAAGGGC 180  
AATGTGAAGA AAACAAGACA CCAAAGGCAC CACAGAAAGC CAAACAAGCA TTCCAGAGCC 240  
TGCCAGCAAT TTCTCAAACA ATGTCAGCTA AGAAGCTTTG CTCTGCCTTT G 291

<210> 11

<211> 291

<212> DNA

<213> Rat

<400> 11

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CTCTGGGAAG GTGGCCAAGA GTGTGACTGC AAAGATTGGT CCCTGCGAGT CTCAAAGAGA 120  
AAAACCACAG CAGTGCTGGA GCCACCAAGG AAGCAGTGTC CCTGTGATCA TGTCAAGGGC 180  
AGTGAGAAAA AGAACAGACG CCAAAAGCAC CACAGGAAGT CACAAAGGCC CTCCAGAACC 240  
TGCCAGCAAT TTCTCAAGCG ATGTCAACTA GCAAGCTTCG CCCTGCCCTT A 291

<210> 12

<211> 291

<212> DNA

<213> Mouse

<400> 12

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 CTCTTGGAAG GTGGCCAAGA ATGTGAATGC AAAGATTGGT TCCTGCAAGC CCCAAAGAGA 120  
 AAAGCCACAG CAGTGCTGGG GCCACCAAGG AAGCAGTGTC CCTGTGATCA CGTCAAGGGC 180  
 AGGGAGAAAA AAAACAGACA CCAAAGCAC CACAGGAAGT CGCAAAGACC CTCCAGAGCC 240  
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<210> 13

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223>

<400> 13

GCCTTTAAGA ACCAACAGAC AG 22

<210> 14

<211> 40

<212> DNA

<213> Artificial Sequence

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GACGAATTCC CACCATGAAA GTTCTAATCT CTTCCCTCCT 40

<210> 15

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223>

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GACTCGAGCG GCCGCTACAA AGGCAGAGCA AAGCTTCTTA 40

<210> 16

<211> 47

<212> DNA

<213> Artificial Sequence

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<223>

<400> 16

TGCACCGTCG ACCACCATGA AAGTTCTAAT CTCTCCCTC CTCCTGT

47

<210> 17

<211> 51

<212> DNA

<213> Artificial Sequence

<220>

<223>

<400> 17

CGCTCAGTCG ACCTACAAAG GCAGAGCAA GCTTCTTAGC TGACATTGTT T

51

<210> 18

<211> 66

<212> DNA

<213> Artificial Sequence

<220>

<223>

<400> 18

ACAGCAGTCG ACCACCATGA AGCTTCTAGC CTCTCCCTC CTTCTGTTGC TGACAGGGAT 60  
GTTAC 66

<210> 19

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223>

<400> 19

CAGAGTGTCTG AACTATAAG GGCAGGGCGA AGC

33